

SPORTS



A win remains to the semifinals

The USSR beat Belgium 1-0 in their first group A game on July 1, in Barcelona, thus eliminating their opponents. The USSR needs a win against Poland on July 4 to advance to the semifinals.

Unfortunately, the USSR failed to get a big enough score against Belgium to be able to rely on a draw in the semifinals. Poland has a better goal difference, 3-0, and may settle for a tie.

protecting their goals, evidently hoping to win convincingly against Spain to move up to the semifinals on a better goal difference, but this tactic often does not pay...

Having drawn 2-2 with Northern Ireland, Austria dropped out, and the semifinalist in this group will be determined in the game between France, which now has two points, and Northern Ireland, which has



Soviet midfielder Khoren Oganasyan scoring against Belgium.

Photo UPI-TASS

The second round games are very tense, some of them marred by patently foul play, like the Italy-Argentina bout (2-1). It holds the sorry record for the number of warnings (five) and one send-off. The Italians played an obviously rough game while the referee repeatedly penalized the Argentines, which again raises the question of refereeing standards and requires special analysis within the FIFA.

The high point of the second round games was the Poland-Belgium encounter (3-0). The Poles played a fast, team-oriented, tactically correct and, most important, aggressive game. Boniek, who scored a third hat-trick at the championship, was an excellent asset to the team, alongside veteran Lato, though failing to score, his assists were so productive and, better yet, surprising that he merits equal credit with Boniek.

Two former world champions West Germany and Britain played an uninspiring scoreless tie, both concentrating on

one. The July 5th games will wind up the second round; the semifinals are to begin July 6.

Spotlight on championship

FIFA has taken a tentative decision to hold all the closing games of the first stage of future football world championships on the same day. The matter will be finalized at the next FIFA congress. The federation also voted down Joao Havelange's proposal to shift the Brazil-Argentina game from one stadium to another, with World Cup organizing committee spokesman stressing that the second stage games would be played where originally planned.

In the first games Czechoslovakia fielded the most men, 20, while Italy, Cameroon, and Peru made with only 13 each. Altogether 364 players were in action out of the 528 who have come for the cham-

ionship. 159 players played through all the games without replacements.

As many as a hundred goals were netted in the 20 first round games, or roughly 2.77 goals per game, compared with 2.50, four years ago in Argentina.

The Cameroon team was given a hero's welcome on its arrival in Yaounde, the country's capital. The team had successively tied with Poland, Peru and Italy, losing not a single game, but failed to make the second round, owing to fewer goals scored.

Hundreds of fans flocked to the Douala airport at four in the morning to greet the team. Thousands of people lined the streets of Yaounde, welcoming the players with heaps of flowers.

Umpires censured

We have looked into all the reports on the refereeing of the first round of the world football championships and they generally coincide with the fans' reactions. A. Franci, head of the FIFA Referees Committee, told newsmen in Madrid. Our committee has taken a series of measures to prevent incidents like those which caused such an outcry both from the press and spectators. Several referees have been banned, from the rest of the games. While several of them will act only as linemen, he pointed out.

A case in point is Augusto Casallo of Spain, who gave a very poor account of himself in the USSR-Brazil bout.



World ice-hockey celebrities Wayne Gretzky (left), Vladimir Tretyak (right) and Vyacheslav Fetisov (center) surely have many things to discuss in between shooting sessions.

Photo by Dmitry Donskov

CHAMPIONSHIP RETURN



The USSR beat the USA 88-74 in a recent basketball friendly game in Moscow.

Photo by Yuri Tutov

Fastest team in Giro d'Italia

Shakht Zagravlodov from Tashkent took the closing 13th stage of the international multi-day cycling race Giro d'Italia, covering 118 kilometres in 2 hr 27 min 37 sec, his third and the

USSR's sixth win in this competition.

The USSR also took the 10th award, while Francesco Casar took the individual title. Serg Krivosheyev from Khabarovsk placed fourth overall.

CHAMPIONSHIPS FINISH

Dmitry Belozherchev of the USSR totalled 57.80 points to win the European Junior title in Ankara, with teammates Vladimir Artemyev and Sergei Gubkov placing second and third.

In the women's division Romanian Elena Saburova was top all-round scorer with 38.10 points. Bulgarian Boyana Novakova finished second and Oly Mostepanova of the USSR third.

Wayne Gretzky in Moscow

While the world football championship is nearing its peak Moscow is playing host to a film crew, shooting a picture about top NHL and world championship striker Wayne Gretzky, from the Edmonton Oilers.

The group includes Gretzky, together with his parents and a younger brother and sister. They will be shooting Gretzky shooting in the Central Army Club rink, attending the "Spartacus" ballet in the Bolshoi, the Moscow circus, Olympic sports complex and walking in the streets of Moscow. The cast will include also celebrated international goalie Vladimir Tretyak. This past spring, says Wayne, I played for the first time ever

on a Canadian line-up for the world championship, where I was most impressed by the Soviet squad. If I were to play the USSR, I would ask for Tikhonov to give me the center spot alongside Makarov and Krutov.

My family finds it very pleasant in Moscow; people very cordial to us and we've seen a lot of exciting things. I was lucky enough to play Soviet ice in the Canadian and the world championships. Those were unforgettable experiences. Hoping to play in class games. The USSR will play more on the ice level, both in Canada and in the Soviet Union.



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STOP

THE AGGRESSION!

Havana. Chairman of the non-aligned movement Fidel Castro has forwarded a message to non-aligned heads of state and government with a persuasive appeal for unified action to stop the Zionist aggression against Lebanon, and to secure an immediate and unconditional withdrawal of the Israeli troops from that country.

The message states that in Beirut the Israeli military is engaged in genocide against the Palestinian and Lebanese peoples, challenging the all mankind. The world should not allow this to happen. F. Castro called upon the heads of state and government to resolutely condemn the Israeli aggressors and to strengthen solidarity with and support for the Lebanese and Palestinian peoples.



Cosmonauts (left to right) Alexander Ivanchenkov, Vladimir Dzhanibekov and Jean-Loup Chrétien after their landing.

HUMANE AID

The Soviet Alliance of the Red Cross and Red Crescent Societies and the Soviet Peace Food have chartered Aeroflot planes to send medicines, blankets, tents, and baby food to the population of the Lebanese Republic and to the Palestinian

refugees who have suffered from the Israeli aggression. This aid has been granted on the grounds of humanitarianism and international solidarity.

Wounded Palestinians and Lebanese will be brought to this country for treatment.



A victim of the Israeli aggression in Lebanon.

SALVADORAN PATRIOTS DEMAND

San Jose. The Farabundo Marti National Liberation Front has demanded that Honduran authorities immediately withdraw their troops from El Salvador, where they are assisting Salvadoran forces in their punitive operations against the guerrillas.

It is not the first time in the past two years, says the declaration of the united revolutionary front's leadership, that the Honduran army has intervened in El Salvador's internal affairs on the side of the antipopular regime. A vivid example was the savage shooting of hundreds of Salvadoran peasants on the river Sumidero in late 1980. This time, however, we are seeing an unusually large-scale intervention, stresses the document. It was undoubtedly undertaken in accordance with instructions from

the US government. From all appearances, it could serve as the prelude to actions, still more dangerous for peace in Central America.

Risking a confrontation

London. Britain is risking a direct confrontation with the US over differences on trade with the Soviet Union, "The Sunday Times" points out, stressing that all efforts by the British government to settle differences with the US administration through negotiation were of no avail.

The British government is planning to permit British companies and American cor-

poration subsidiaries in Britain to reject instructions from any other country, if damaging to the interests of British trade, the paper emphasized.

It is becoming increasingly clear, it further noted, that the American embargo will not reach its main objective, in any event, holding up construction of the Siberia-West Europe pipeline.

FACTS and EVENTS

● The liberation forces in South Africa have switched from guerrilla to open warfare against the military machine of the racist regime in Pretoria, said Oliver Tambo, President of the African National Congress (ANC) of South Africa.

● Former Venezuelan President Carlos Andrés Pérez has advocated broader contacts with Cuba. Such relations, he stressed, would facilitate peace and security in the Caribbean and the entire Latin American region.

and experiments worked out by French and Soviet specialists. For his successful mission Jean-Loup Chrétien was awarded the title of Hero of the Soviet Union, and received an Order of Lenin and the Gold Star medal.

FRENCH PRESIDENT CONGRATULATES SPACEMEN

In his message of greetings to the mission crew, François Mitterrand stressed that the flight was a striking example of the 15-plus years of fruitful cooperation between the Soviet Union and France in the study and exploration of outer space for peaceful purposes, marked by the constant desire for maximal mutual gain.

It is a symbol of the goodwill of the French people, the president continued, aiming to build peace in Europe on the basis of traditional friendly relations and respect for the rights formalized in the Helsinki agreements and to promote good relations among all the peoples of our continent.

USSR PILOT-COSMONAUT VITALY SEVASTYANOV COMMENTS ON THE FLIGHT

The programme of joint space experiments developed by Soviet and French experts has been fully completed. The equipment used in the research was left behind, aboard the station, for use in further experiments by Anatoly Berezovoi and Valentin Lebedev.

Undoubtedly the importance of the flight from the scientific point of view will be apparent only after the film has been developed and the new alloys created in space and the lab research done there have been thoroughly studied on the ground.

I would like to stress the novelty of the experiments conducted: each of them faced the cosmonauts with problems hitherto unattacked in space flight. To illustrate, the "Crystal" device was used to study the complex processes of diffusion of two metals in different physical states, liquid and solid.

There was an exciting element in the conception and, I believe, in the results of medical studies of the cosmonauts' cardiovascular systems, conducted with ultrasonic devices, used for the first time in space. I expect that the pictures of the night sky taken with French high-sensitivity cameras, will provide researchers with fresh data on atmospheric phenomena, interplanetary media and galactic radiation.

Armenia: ancient and modern

these words of the famous American painter Rockwell Kent could serve as a subtitle for this republic's anniversary exhibition "In One Family", now on display at the USSR Exhibition of Economic Achievements.

Armenia. When one hears the word one imagines mountains and valleys among rocks, the picturesque Lake Sevan and ancient monuments, of which there are more than four thousand, and perhaps the "inimitable" image of Yerevan, a city founded in 782 B.C., but which has a strikingly modern appearance as well.

But Armenia is not only a land of ancient monuments. It is a land of developed power and electronic industries,

and chemical engineering. The small Armenia with its 3.1 million population is the second largest among the 15 constituent republics in electrotechnical items, fourth in lathes and fifth in instruments.

One is surprised not only at the diversity of products shown in the republic's displays, but also by their high performance and modern design. The exhibits include the latest Aral-2501, measuring instruments, tape-recorders, and modern machine-tools.

Tourist maps and diagrams seem to invite exhibition guests to come to Armenia for a more intimate acquaintance with the ancient and modern culture of the Armenian people.

Handwritten text: "The USSR is 13.6"



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Round the Soviet Union

● **AERIAL TRANSPORTATION OF FRUIT AND VEGETABLES FROM TAJIKISTAN HAS BEGUN TO CITIES IN THE FAR NORTH AND THE FAR EAST WHERE L-76 AIR-LINERS HAVE BEEN BRINGING IN PEACHES, APPLES AND TOMATOES.** Tajik farms will provide the North with more than 40 thousand tonnes of vitamin-rich products.

● **A SCULPTURAL COMPOSITION, DEDICATED TO THE ZAPOROZHISKY COSSACK IVAN PODKOVA, HAS OPENED IN LYOV, ON TOP OF THE STONE PEDESTAL STANDS A BRONZE PORTRAIT OF THE HERO UNDER WHOSE COMMAND A JOINT MOLDAVIAN AND UKRAINIAN ARMY DEFEATED TURKISH TROOPS AND LIBERATED THE CITY OF YASSY IN 1577.** Later, the valiant warrior withdrew to the Ukraine where he was killed in Lvov. The Cossacks' exploits were extolled in Moldavian and Ukrainian oral legends and in a poem by Yury Shvachenko.

● **A CAMPAIGN "YOUNG CYCLISTS" HAS BEGUN IN MOSCOW UNDER THE SPONSORSHIP OF THE CITY'S STATE TRAFFIC INSPECTION BUREAU.** 100,000 leaflets with illustrated instructions have been printed for the benefit of schoolchildren riding bikes. The participants of the campaign will inspect the boulevards, streets and parks where it is proposed to create special tracks for cyclists.

● **THE FIRST PASSENGER TRAIN HAS ARRIVED IN KOSTOMUKSHA, A MINING TOWN UNDER CONSTRUCTION IN THE NORTH-WESTERN REGION OF THE KARELIAN AUTONOMOUS REPUBLIC.** The railway's route passes through taiga and swampy areas, and nearly 120 civil engineering structures were erected along the last 90-kilometre stretch alone.

SOVIET STUDENTS' 'THIRD WORKING TERM'

Classes were over in Soviet universities and colleges in June and vacation began. How is it spent? The question has been answered by at least 800,000 members of student construction teams, making up one-sixth of the country's student body.

330 students of Moscow University's physical department decided to go to a construction site during their 1959 summer vacation. They formed a team, made a contract with the management and produced for inspection a number of finished projects by the end of the summer. That was the beginning of a movement which was dubbed the working term.

What attracts young people to the construction teams? Poets show that for over 50 per cent the desire to work in places



where their labour is most needed by society serves as the chief motivating force. Another 40 per cent felt the romantic urge to travel, to try their strength in unusual climatic conditions.

Here are some figures from Moscow University. Those who work on the construction projects show up on the sicklist three times less often, because the summer work builds up their health. They also apply to the student union for financial assistance less frequently, because 45 working days in the north bring in about 700 roubles.

Finally, more of them are offered managerial posts after graduation, because they have not only theoretical knowledge but practical experience, too.

A total of 8.5 million Soviet students have been through the working term over the past 23 years, contributing 13,000 million roubles' worth of construction. According to the estimates of the student construction teams headquarters, another 1,500 million roubles will be added in 1962.

In the photos: members of the Moscow student construction team boarding train at the Kazansky Railway Station, off to construction sites in the fellow lands area in the East. Photos by E. Zhigalov

CANAL MAKING ITS WAY INTO THE STEPPE

An important landmark has been reached in the construction of the second stage of the North Crimean Canal. The first units of a powerful pumping station have been switched on, and from the Dnieper water started flowing into the 42-kilometre canal, which joins the two branches of a man-made river on the western part of the peninsula.

The route crosses a height, with a chain of pumping stations driving water up one hundred metres, at a rate of 105 cubic metres per second when all the units are operating.

The second stage is part of the general irrigation project for the Crimea, bringing water also to Simferopol, Sevastopol and the south coast resorts.

When the project is completed the Crimean Region will have 385,000 hectares of irrigated lands.

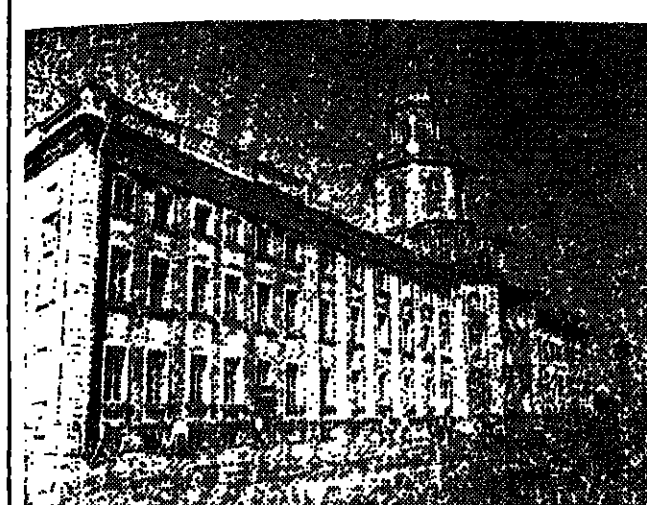
A MOUNTAIN POWER STATION

The first cubic metres of soil have been dumped into the body of the dam at the Spandaryan hydroelectric power station on the Vorotan River in Armenia, on the third and last stage of the Vorotan cascade.

Each year the station will supply almost 160 million kWh to Zangazur — an industrial and agricultural region of Armenia, which will use it to develop its engineering, electronics, instrument-building and mining industries. Agriculture will also receive additional energy. Part of the water stored in the dam will be used to irrigate fodder fields in the republic's largest stock-rearing region.

Places to visit

RUSSIA'S FIRST MUSEUM



This building stands on Leningrad's Vasilyevsky Island. It houses two museums: the Museum of Anthropology and Ethnography and the Museum of Mikhail Lomonosov, the famous

1704, the prototype for Russia's first museum of natural history.

The museum today has about 400,000 exhibits collected by prominent Russian explorers, expeditions fitted out by the USSR Academy of Sciences and the USSR Geographic Society. They deal with the culture and life of the peoples of India, Indonesia, North and South America, Africa and Asia.

The Lomonosov Memorial Museum contains his works on history and literature, the optical instruments he invented, as well as instruments for studying the properties of electricity, the equipment of his first chemical laboratory, and mosaic panels he made.

The building, one of the oldest in Leningrad, is interesting in itself. It was built in 1734 in the Russian Baroque style. Every year the museum is visited by about half a million people, including many foreigners.

Assault on myopia

The absence of a single view on the origins of myopia has led to a situation in which this disease has become widespread everywhere. The glasses worn by every fifth person on earth are only a temporary solution of the problem. But now ophthalmologists from Riga have come forward with an original cure for myopia.

They suggest training the muscle which controls clear

vision of the eye. They selected a large group of children from schools in Riga, all of whom had clear signs of approaching myopia. The doctors gave the children several sessions of electro-puncture treatment: they applied weak electrical current to biologically active spots functionally linked with the eye. It appears that this treatment helped make the muscle stronger and more en-

during and stopped the onslaught of the ailment.

This is the first time that the principles of acupuncture have been used in the treatment of myopia. The doctors from Riga believe that such reflex therapy is more effective than both surgical intervention and the lengthy and not very helpful eye exercises making use of lenses.

This discovery by Latvian ophthalmologists may help reverse the forecast of an unlimited growth in myopia.

OF INTEREST

Rare volume

A 16th-century book, "Cosmography or Description of the World", printed in Basel in 1571, has turned up in an antiquarian bookstore in Riga.

Somebody's family heirloom, inherited by an old woman, it attracted expert attention at once. The massive leather binding, closeable with a lock, contained the posthumous work of S. Munster, a known Swiss geographer, mapmaker and mathematician. The volume became one of the rarest acquisitions of the Latvian department of the All-Union Astronomical and Geodesic Society.

The "Cosmography" features maps on the population, flora and fauna of various states in Europe, Asia, and Africa, citing their histories and habits. The book is richly illustrated with engravings. It contains old geographical maps and pictures of cities. The writer also gives information on state of science and technology in his time.

Cat vs cobra

Rippling brave mangrove Rik-Tik-Tavi has got himself a rival in the person of a cobra who resides in the Gorny pincer camp near the Uzbek town of Naval.

The cat chose a hollow in an eucalyptus tree for his afternoon nap, and became utterly indisposed upon finding an unwelcome guest in his home — a cobra. Grabbing the snake by the tail, Vaska promptly threw him out. Children looked on, as the cat confidently defeated his rival, after which he calmly climbed back into his hollow.

Recreation among antiquities

New routes plotted on Georgia's tourist maps will take guests to the towns of Telavi, Lagodekhi, Sagaredzho, Zugdidi. These towns include over one hundred restored 18th-century buildings. Central squares and pavements, inlaid with naturally coloured stone, have also been renovated.

While retaining their old look, the towns have acquired modern conveniences, with tourist complexes accommodating up to two thousand people.

Georgia has 12 thousand architectural monuments, many of which are open to tourists.

EXHIBITION OF RUSSIAN LACQUERS

Those who are fond of Russian lacquers will be interested in the exhibition, "Russian Lacquer Painting on Metal" which has opened in the All-Russia Museum of Decorative, Applied and Folk Arts.

Most of the Russian paintings on metal are done on tea-trays. There are few people who know nothing about the famous tea-trays of Zhostovo and Nizhni-Tagil — colourful, cheerfully decorated articles, which would brighten any home. The most favourite subjects of modern metal painters are flowers: garlands, fruit, and, on rarer occasions, birds. How did the world-famous craft of Zhostovo and Nizhni-Tagil originate? It is the old days: the craftsmen usually borrowed their subjects from famous paintings and engravings. Much work went into the manufacture of each tray: the figured handles were especially worked by stiltmen, delicate lacinations were made on the high rims while the paint-



ing of the metal itself was a highly painstaking process.

It was also necessary to adapt the paintings to match the shape of the tray, and these shapes were sometimes pretty whimsical — polyhedral, etc.

Apart from trays, on display here are metal statuettes of the

Science and technology

THE POWER POTENTIAL OF SMALL RIVERS

The minor rivers in Georgia are capable of producing nearly 40,000 million kilowatt-hours of power. This is clearly shown on a map of the republic's hydro-energy resources compiled by local scientists.

The Research Institute of Energy and Hydrotechnical Construction has made a detailed estimate of the energy resources of 88 small rivers, said Institute Director G. Chogvadze. It usually takes years to build large hydropower stations in the mountains. Meanwhile industry in the area expands which means that not infrequently an energy deficit forms in the republic at the same time as the commissioning of a large power station. Such deficits can largely be avoided by concentrating on small hydropower stations which are two to three times quicker to build. In a few years time the first three such stations will be set up in Georgia.

JACKET

CONDITIONER FOR MINERS

Ukrainian scientists have designed a novel jacket conditioner, creating comfortable conditions for a miner even with a temperature of 30-40°C above zero.

The large-scale programme "Cold" is being implemented in the coal industry of the Donetsk Basin. It includes measures to create individual means of protection against heat, necessitated by the growing depth of coal mining, in some areas of the basin reaching 1,300 metres. At lower depths the temperature of rock is higher. The new means of individual protection is designed to shield miners from the effects of unfavourable temperature conditions.

Under the programme "Cold", mines are equipped with large-capacity stationary refrigerator plants and mobile air conditioners. Work is being done on a large scale to rebuild subterranean air recycling systems.

The programme to be implemented in the course of the current five-year plan period (1961-65) will cost the state 100 million roubles.

VIEWPOINT

PROBOTS IN SOVIET INDUSTRY

Igor MAKAROV, Corresponding Member of the USSR Academy of Sciences, head of the scientific council on Robots and Robotic Systems

More than two hundred different robots have been designed in this country, most of them produced by our industry. They are primarily "iron assistants" performing arduous jobs in extremely difficult conditions.

Many industrial workers are engaged in routine manual operations on assembly lines: stamping machines, rolling mills and furnaces, in store-rooms, etc., primarily in heavy industry and engineering. And this is where most manipulators are now being introduced substituting for foundry men and formers, loaders and welders.

The production of automated complexes equipped with manipulators has begun. The Voronezh Elektrosignal, for example, uses them to produce stands for TV-sets and the Dnepropetrovsk Yuzhnyy engineering plant — to manufacture spare parts for the Byelarus tractors.

While well-tested systems have been introduced into production, new, more powerful and more diversified machines are being designed. The N. Bauman Higher Technical School in Moscow created a unique robot which can lift and handle items as heavy as the manipulator itself. The work was supervised by Corresponding Member of the USSR Academy of Sciences Professor Yevgeny Popov. (Most robots are ten times as heavy as the load they handle.) The Moscow Lomonosov University developed a three-handed robot to work in extremely difficult conditions: underwater, in hazardous environments, etc. There is now a universal iron helper with a self-control system using telemetric sensors, radars and TV systems working as its brain, eyes and other sensing organs.

So we can speak about quite a new generation of Soviet robots although the word "generation" is very relative. The so-called adaptive machines, which are able to adapt themselves to various conditions and possess certain "intelligence", do not at all supersede the first generation of automatic manipulators, with hardware control systems.

Three specialized plants for the production of such robots are now being constructed, and will be commissioned in 1963-64.

The situation today is such that, on the one hand, it is impossible to introduce a robot into a factory, and, on the other, it is necessary to bring in a robot which is not yet ready for use. After ten or more years has elapsed their introduction. In order to remove the psychological barriers and arouse everyone's practical interest, thus accelerating their design and production, this country has developed a special system of motivation and incentives in this field.

Lyudmila MAKAROVA, A Zhostovo tea-tray.

FROM the SOVIET PRESS

SOVIET GAS PIPELINES

PRAYDA writes that some Western estimates put at approximately 15 thousand million dollars the total cost of the construction and outfitting of the major gas pipeline between Siberia and Western Europe, whose length between Urengoi and Uzhgorod in the Soviet Union alone is a little under five thousand kilometres.

Yet, this pipeline, to deliver gas for exports, is only one of six technically similar lines which are being built in this country under the present five-year plan (1961-65).

These projects are unprecedented in world history. It took the United States a whole decade to build the Trans-Alaskan pipeline, comparable with the Soviet ones in its technical performance, whereas this country commissions one such pipeline every year.

An eloquent testimony to the scale of the Soviet pipeline projects is the fact that the investment in their construction under the 11th five-year plan exceeds the expenditures on the BAM railway project, the KamAZ and Volzhskiy motor works, and the Atomashskiy factory for the manufacture of nuclear equipment taken together. The combined power of the compressor stations along the Siberia-Western Europe pipeline is equivalent to five hydropower projects of the Dneproges type.

In what way will the Soviet economy benefit from the construction of these pipelines? Their commissioning will solve one of the strategic tasks in the development of the Soviet economy: to increase the share of Siberian natural resources in the national economy. It will also boost the fuel and energy potential of this country, hundreds of industries will receive their first-rate clean fuel and raw material.

WOMEN IN SCIENCE

Are women an asset to science, wonders sociologist Svetlana Gurvich in SOVIETSKAYA ROSSIA. Hardly any sociologist would venture to say whether it is women or men who have more of the qualities needed for scientific work, the author remarks. Apparently, ability and knowledge count for a lot more than sex.

But to do well in any area inherent potential is not enough, since it requires right conditions for its realization. It is impossible to engage in research only during strictly set working hours and only at one's place of work; a scientist, fully concerned with his work, will surely think of it outside his working hours. But man

and women vastly differ in their ability to give time to their research. Even with full legal equality women still bear the brunt of child-care and household chores. Thus women have a much harder time of it in research work, where success depends on tremendous effort.

Women have long and confidently asserted their right to conduct research, Gurvich concludes. Recently we ran an inquiry that graphically proved that men have only a very slight edge over women in respect to the number of dissertation papers written. It seems we are increasingly facing another, much more complex and vital issue: we must help able and willing women to go into research work—but not at the expense of physical and psychological strain, or to the detriment of their families and children.

HOW LONG WILL THE FORESTS LAST?

This question, asked by a correspondent from the MOSKOVSKIY KOMSOMOLET newspaper, was answered by Yuri Yegorukov, First Deputy Minister for the Timber, Pulp-and-Paper and Woodworking Industry.

The Soviet Union, with 1,233 million hectares, leads the world in the size of its forested area. Soviet forests hold one-fourth of the world's timber reserves, which amount to more than 84,000 million cubic metres. We have an annual growth in timber of 924 million cubic metres. This is twice the amount that is felled each year. In the European and Uralsian regions, for instance, 6,600 million cubic metres of timber has been felled over the past quarter of a century, while the overall stock of growing timber here has increased from 15,100 to 21,800 million cubic metres.

Forests in this country are distributed unevenly. Most of the timber consumers are in the European part of the USSR, while the timber reserves there account for no more than 25 per cent of the country's total. Everyone knows the difficulties of procuring timber in Siberia and the Far East.

Therefore, despite the enormous reserves of timber, the problem is still acute. Under Soviet legislation regulating the use of forests, there are three main requirements mandatory for the timber procuring organizations—forest use must be continuous, it should not deplete the reserves, and it should be rational. Only a planned economy can allow the development of the timber industry without exhausting its resources. In this respect, the Soviet timber and forestry legislation is uncompromising. Through purposeful measures the forested area in this country over the past 25 years has increased by 67 million hectares, 35 million of which are coniferous forests.

CHILDREN WANT FAIR TREATMENT

Fair treatment provides a very delicate, very thin line between good and evil, marking the lower limit of good behaviour, says writer Simon Solovychuk in LITERATURNAYA GAZETA. Love for children without justice is always bad for them, because it is love that is blind.

Children often say about their parents or teachers that they are "not fair". It is not that they like strictness, but they are ready to put up with it, as they would put up with anything, if only they see that justice is done. There was a boy who once told me about his school, "We have very bad teachers, who always reprimand those who do not deserve it, and even then do it for the wrong reasons" — a very concise definition of a bad school. Well-known Soviet educator Sukhomlinsky was opposed to all punishment, and believed that in 99 cases out of a hundred we punish children unjustly.

Children are children because their expectation of justice is infinite, and unconditional. To them justice appears to be the main thing in the world they are entering. A child is shocked at any injustice.

If there is justice in a family, the children grow up to good, even if it might seem that they grow "all by themselves", "like grass in the meadow", continues Solovychuk. One child in the family may be less charming, less tender and loving, or have a physical defect. If this one child is treated less fairly than the rest, he will turn out worse than his good brothers and sisters, even though they all have the same genes and were brought up in the same way. It is often said, "My parents did not have much time to bring me up." What the parents probably did was to maintain certain standards of justice in the family.

In families where there is no justice, it does not matter whether the children are beaten, or handed over to the police, or even worse, they are simply neglected, as they will grow up to be bad people unless they succeed in breaking away from their parents, i.e. a more, they meet someone who would be stronger, i.e. a more, just influence than their parents.

You will say that everyone wants that children to be good, that everyone believes he is "justice incarnate". Look at the artists — every one of them thinks of himself as talented.

One cannot educate future parents through lectures on the role of the family in society, or practical classes in "swaddling dolls". This comes easy. The important thing is to develop the sense of justice. How should we develop it? We must think a lot more about this.

PROFILES

Viktor TUROV



The famous French artistic director Jean Renoir wrote in his book, "My Life, My Films", that an artist is simply a person who knows how to make his emotions visible, and that art is an expression of one's innermost, sometimes instinctive dreams.

These are beautiful definitions, indeed.

The "visible" aspect of Turov's life was the war which cut through his childhood like a sword. His dream, quite a definite one — not even a dream but an ineluctable desire — was peace in the world. This dream can be used as a frame for a portrait of the Byelorussian film director Viktor Turov.

There is no greater pain and sorrow for him than what his land and countrymen passed through during the war. His early memories include the arrest and death of his father, a partisan, his deportation to Germany, and his final liberation... "I Come From My Childhood", "The Sons Are Leaving to Fight", "War Under

the Roots", "The Time of Her Sons", "Through the Graveyard" — these are some of the films he has made. They all speak about the war. They are not even so much about the war, says Turov, but about people in the war. For in that unbelievably horrible and tragic situation people showed their true values — their courage, heroism, moral fortitude.

Turov is a director with a sparing restrained style. He acquires this manner when he worked in documentary films. What he aims at is the truth, the documentary truthfulness of everything, and this determines his choice of "colours" which help portray his characters.

This can be said of the heroes of his film "People in the Bogland", based on the novel, "Polesye Chronicles", by the well-known Byelorussian writer Ivan Melesh. This film won first prize at this year's national festival in Tallinn. But it shows a different period — the end of the 20s.

At the present time, Turov is working on a sequel to the film. The star and unblended truth that keynotes all his films is present. He left the wartime theme, but not his artistic credo: As long as a single person is suffering, all of us suffer, he says. He sympathizes with people, no matter where they live and what epoch they belong to. His film, "The Death of Gentleman Chertopkhanov", based on a story from Turgenev's "Notes of a Hunter", is also on the same theme. Turov's principle is that if one decides to stage a classical work, one must choose characters that answer one's ideas, outlook and feelings.

I had a long conversation with him about it, and when the talk was drawing to a close he suddenly confessed what a tremendous happiness it is for an artist to work and meet interesting actors. I am thinking, he said, of making a film about self-awakening of a man as he meets good people and feels in harmony with the environment.

Alexander DONSKOI

DAYS OF MONGOLIA IN THE RUSSIAN FEDERATION

The city of Irkutsk in Eastern Siberia is celebrating the Days of Mongolia in the Russian Federation. A big delegation, which has arrived from the fraternal country, includes writers, artists and a group of actors.

The Irkutsk Art Museum has mounted an exhibition of the So-

viet artist V. Rogal dedicated to the people and landscape of Mongolia, and a ten-day book event has been arranged.

The Days of Mongolia in the Russian Federation will continue in Moscow and Leningrad.

SPAIN IN AZERBAIJAN

Spanish landscapes predominate in an exhibition of recent works by Azerbaijan painter David Kyazimov entitled "Over Spain", which opened recently in Baku, the capital of Soviet Azerbaijan (Transcaucasia).

Art critics have drawn attention to the documentary quality

and the vivid colours of the paintings on show.

Spain holds out a special attraction for Azerbaijan artists. The series of paintings on a Spanish theme by Tair Salakhov, Laureate of the USSR State Prize, for example, is rated among the major achievements of Azerbaijan art.

FILM ABOUT GEORGI DIMITROV

The first night of the film "Warning", devoted to the outstanding figure of the Bulgarian and international communist and working class movement, Georgi Dimitrov, was given in Kiev (Ukraine). The film has been produced by film makers of Bulgaria, the Soviet Union and the GDR, and directed by Juan Antonio Bardem, a prominent Spanish film director. He shot many sequences of the film at the Alexander Dovzhenko film studios in Kiev. Full-scale settings were built there, which, in the opinion of the Bulgarian cameraman Plamen Vargenstain, were "amazingly realistic", and Kiev artists and masters of trick photography showed high professional standards, mastery and inspiration.

ALLA PUGACHOVA SINGS IN PARIS

An enraptured audience at the Olympia Concert Hall in Paris gave an enthusiastic welcome to Alla Pugachova, who sang about the first French cosmonaut, and about peace and friendship on earth. The concert of the popular Soviet singer went on for two and a half hours and was received with thunderous applause. Alla performed her new

songs, which have already won recognition — "The Harlequin", "The Kings Can Do Everything", "The Ancient Clock", "A Woman Who Sings", "This Way No Path of Roses". The latter is the title song on an album released by the Melodie Record Company in Moscow. Pugachova sang twenty songs, some of them in French.

PRESERVE FOR POSTERITY

"Preserve for posterity, the legacy of the artistic genius of the people" was the motto of the 4th nationwide congress of the society for the protection of historical and cultural monuments, held in Novgorod.

The very history of the town on the Volkhov River is a fine illustration of the problems discussed at the congress. Local architects and artists rebuilt and

restored around 130 early structures, among them miniature architectural masterpieces like the St Sofia Cathedral, the Faceted Chamber, the Yermolov tower of the Novgorod Kremlin, and the unique frescoes of the phanexes of the Kremlin.

Altogether 26 thousand local historical and cultural monuments are under the protection of the state.

Rachmaninov Museum

A house museum devoted to Rachmaninov, the outstanding Russian composer, has been opened in the picturesque village of Ivanovka, in the Tambov Region.

Over a period of thirty years Rachmaninov often visited the village where his wife's parents had an estate. Here the composer created many of his great works. Some received their first performance in the old and beautiful park of the estate.

Great care has been taken in Ivanovka to preserve all links with the composer's name. A two-storey house has been built — an exact replica of the house in which the composer lived and worked. Fortunately, the designs have been saved. The composer's study, the drawing room and other rooms look exactly as they were. There are many books, photos and autographed sheets of music on view. A music room has been especially organized where one can listen to Rachmaninov's work. A statue to the composer has also gone up in Ivanovka.



Leo Tolstoy's play, "The Unlucky Soldier" is one of the latest premieres at Moscow's Mambulo Theatre, which continues its season.

A scene from the play, "The Unlucky Soldier" by Leo Tolstoy, directed by Masha.

Photo by Vera Petrusova

WHAT'S ON!

July 6-9

THEATRES

Kremlin Palace of Congresses. Novosibirsk Opera and Ballet Theatre performances: 6 — Khatatryan, "Gayane" (ballet); 7 — Tchaikovsky, "Mazepa" (opera); 9 — A ballet dancers concert.

Stanislavsky and Nemirovich-Danchenko Musical Theatre (17 Pushkinskaya St), 7 — Tchaikovsky, "The Snow Maiden" (ballet); 8 — Strauss, "The Gypsy Baron" (opera); 9 — Mozart, "La flûte enchantée".

Operetta Theatre (6 Pushkinskaya St), 6 — Millyutin, "Crisis in a Flurry"; 8 — Kalman, "The Princess of Dances"; 9 — Zburbin, "Penelope". Stanislavsky and Nemirovich-Danchenko Musical Theatre performance: 7 — Suppe, "Donna Juanita".

FILMS

The Thirty-Nine Steps (Great Britain). On the eve of World War One German intelligence agents plot the assassination of the Greek Prime Min-

ister during his visit to London. Cinema: "Form" (14 Sukharevskaya), Metro RS; "Miklon to Sanatorion" (Mambulo Studios).

Simple human truth and kindness, sincerity and trustfulness help the hero of the film cope with various problems.

Cinema: "Yerevan" (82 Dostoevsky Highway), Metro Byelorussian, Buss 563, 63.

EXHIBITIONS

Museum of Oriental Art (18 Opukha St). "Afghan Art", an exhibition featuring 300 works by painters, print and paper artists, as well as applied art, decorative objects, carpets, wood carvings, metalwork, etc. Dated from the 19th to the 20th century, the exhibition is open daily, except Monday, 11 a.m. to 7 p.m. Metro Kurskaya, 10.

Museum of Decorative Art (3 Dostoevsky Highway). "Afghan Art", an exhibition featuring 300 works by painters, print and paper artists, as well as applied art, decorative objects, carpets, wood carvings, metalwork, etc. Dated from the 19th to the 20th century, the exhibition is open daily, except Monday, 11 a.m. to 7 p.m. Metro Kurskaya, 10.

MUTUALLY ADVANTAGEOUS COOPERATION

The mutually advantageous trade, economic, scientific and technological cooperation between the USSR and India provides a striking example of fruitful ties on an equal basis between states with different social systems, declared N. D. Tiwary, the Indian minister for industry, steel and mines. Addressing a symposium here on

cooperation between the two countries, the minister stressed that the USSR has made a decisive contribution towards the establishment and strengthening of the state sector, which forms the basis of India's national economy. It has built or is constructing in India about 80 large industrial projects.

UKRAINE AT THE POZNAN FAIR

The Ukrainian SSR will have, for the first time ever, a separate display at the international Poznan fair in Poland this year. It has displayed its products on many occasions at national and international fairs in Budapest, Zagreb, Plovdiv, Poznan, Leipzig, Montreal, Los Angeles, Al Jeddah and other cities.

The Ukraine will bring some 2,000 items for the Poznan show. The emphasis will be on show-

ing the Soviet Ukraine as one of the critical fuel-and-energy, metallurgy and machine-building areas of the USSR. Indeed, in the nationwide division of labour the republic accounts for over 40 per cent of the production of steel and rolled metal, and one-third of coal production. It has all the main branches of machine-building, producing aircraft, ocean going ships, trunk locomotives and railroad cars, tractors and combine harvesters, electronic microscopes, TV sets, computers and artificial diamonds.

ATOMIC POWER GIVEN AN ANOTHER BOOST

At the construction of the Dukovany atomic power station, Czechoslovak organizations and Soviet specialists have decided to do all they can so that in 1983 the first reactor will generate its first electricity.

The Dukovany station is the third atomic power project in Czechoslovakia built under the programme for the development of atomic energy. This programme was launched under an agreement with the Soviet Union for the construction of two atomic stations in Czechoslovakia. The first of these outstanding Soviet equipment plants has been in operation for more than a year.

Czechoslovak specialists say that the station is operating smoothly. Last year, it produced more than four and a half thousand million kilowatts of electricity.

With the help of the Soviet Union, Czechoslovak industries have completely mastered the manufacture of atomic reactors and other equipment for atomic projects. Preparations have begun for the production of VVER-100-type reactors, for the Tselin atomic power station.

The items of industrial production displayed at the fair, while illustrating the republic's achievements in separate branches of the economy, will simultaneously demonstrate the Ukraine's export capabilities, which, within the framework of Soviet foreign trade, supplies locomotives, excavators, trucks and cars, equipment for mining, construction and electric engineering enterprises, agricultural machines, computers, automatic equipment, various instruments, etc. to 109 countries.

Intourist news

WOES AND WOWS

Jane Parson was out of luck. The young American cellist came to Moscow from New York to take part in the International Tchaikovsky Competition. But an attack of appendicitis ruined all her plans: she was promptly operated on in the Botkin Hospital and removed from the list of contestants. Since the operation and the following treatment were free and

SUCCESS OF SOVIET EQUIPMENT

The business community in Japan has been showing a growing interest in the expansion of mutually beneficial cooperation with the Soviet Union. According to Yasuyuki Inoue, president of Aichi Sangyo, a major Japanese trading company, Soviet machine tools are of a high technical level, as well as being of good quality and reliability.

Aichi Sangyo has been in business for more than 50 years. Cooperation with Soviet foreign trade organization is an important part of its operations. Soviet installations for the hydraulic cleaning of castings are working efficiently at factories belonging to Mitsubishi Motors, Isuzu Motors, and at Kawasaki Nipponki. At present, Aichi Sangyo is negotiating deliveries of Soviet equipment with ten other firms.

The representatives of Japanese companies that I met have nothing but praise for Soviet machines. Aichi Sangyo intends to expand its business contacts with the Soviet Union, Y. Inoue stressed. I am sure that this is in the interests of both countries. Japanese firms buy precision machine-tools, welding installations and equipment for the metallurgical industry from the Soviet Union. All told, there are more than five thousand Soviet machine-tools operating in Japan.

Jane Parson's

working member

entire set

175

Mass, kg

18,000

The GPK is also available in GPKSV and GPKSN modifications for heading jobs with inclination +20° to -10° and -25° to +10° respectively

30 YEARS in the world market

DRIVING ENTRIES WITH CUTTER LOADER COMBINES MAKES DRILLING AND BLASTING OBSOLETE

because they offer FAR HIGHER EFFICIENCY in mechanized driving of horizontal and inclined mine workings in mixed faces, with separate coal and rock excavation

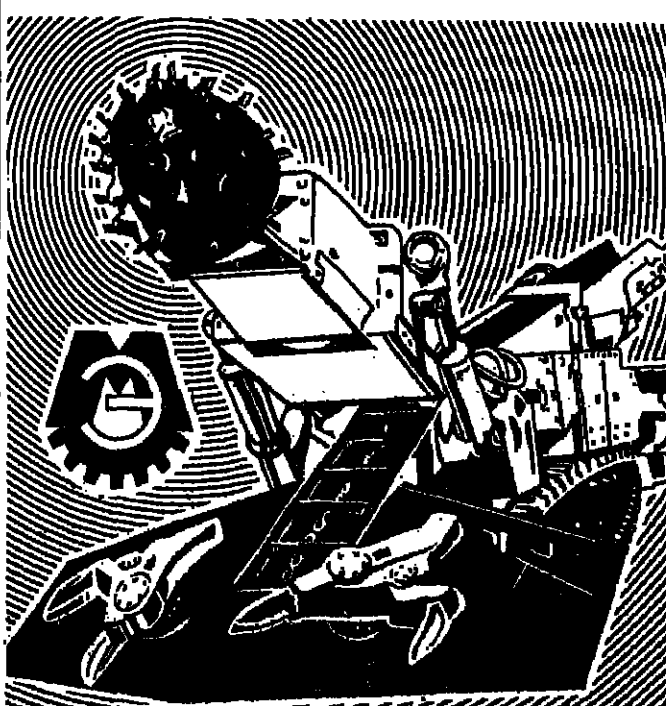
4PP2 ENTRY-DRIVING CUTTER-LOADER

Rock hardness (Protodyakonov's Scale)	to 6
Throughput by cutting, m ³ /min	to 0.5
Working cross-section	any (but round)
Working dimensions, m	
height	2.6 to 4.5
width at base	3.6 to 6.2
Working cross-sectional area, m ²	9 to 23
Working inclination angle	±10°
Speed on endless tracks, m/min	2.0
Mean specific ground pressure, kg/cm ²	1.1
Working member motor, kW	105
Total motor power required (less sprinkling system pump), kW	230
Mass, kg	40,000

GPK ENTRY-DRIVING CUTTER-LOADER

Rock hardness (Protodyakonov's Scale)	to 4
Throughput, l/min	1.8
Working inclination angle	±10°
Working cross-sectional area, m ²	4.7 to 15
Speed on endless tracks, m/min	6.8
Motor power, kW	
working member	55
entire set	175
Mass, kg	18,000

The GPK is also available in GPKSV and GPKSN modifications for heading jobs with inclination +20° to -10° and -25° to +10° respectively



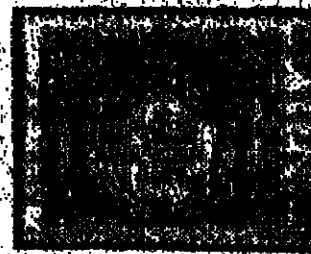
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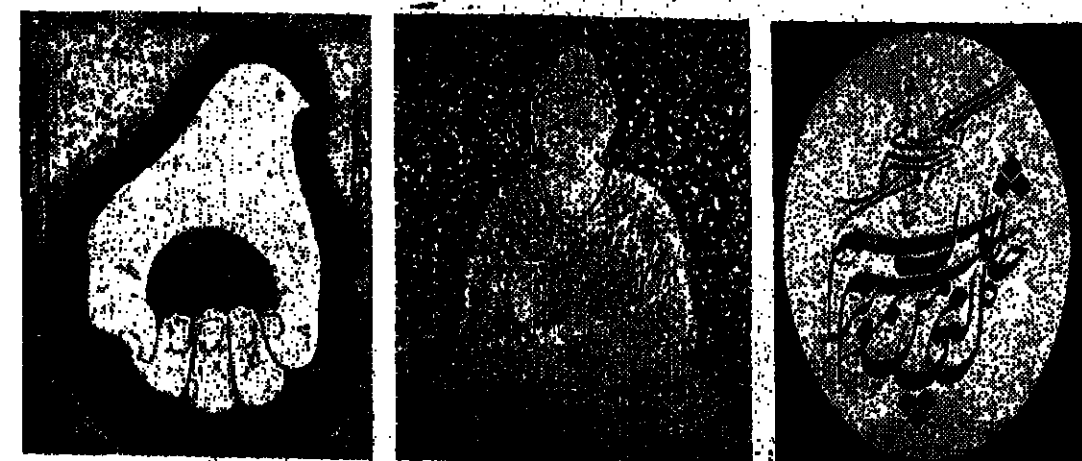
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IN HONOUR OF WORLD CHAMPIONSHIP

The USSR Ministry of Communications has put out a 10-kopek stamp devoted to the current Football World Cup in Spain.



AFGHAN ART



▲ Anam Akram, "Peace is in Our Hands". "Buddha". ● Khamaroddin Cheshki. A sample of his calligraphy.

The Moscow Museum of the Art of Oriental Peoples at 18 Opukha St is the site for the exhibition "Afghan Art", recently brought from Kabul, providing Soviet art lovers for the first time, with a broad and varied view of the country's culture. The colourful and originally designed hand-made carpets and national costumes, as well as unique woodcarvings, enameled arms, and tableware, and

jewellery provide a full representation of the traditional decorative and applied art of the 19th and 20th centuries, along with some 18th century pieces. Also included in the exhibition are works by contemporary artists and calligraphers.

In all there are around 300 items provided by the Afghan government and artistic organizations.

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